PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE PATENT APPLICATION OF:

THOMAS G. KRAJEWSKI AND JEFFREY J. DEGROOT

U.S. SERIAL NO: UNKNOWN

GROUP: UNKNOWN

FILED: CONCURRENTLY

EXAMINER: UNKNOWN

FOR: ENHAN

ENHANCED TOUCH-SCREEN DISPLAY

SYSTEM

La Crosse, Wisconsin October 19, 2001

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

Applicant encloses copies of U.S. Patent 6,246,394 to Kalthoff et al.; U.S. Patent 6,016,140 to Blouin et al.; U.S. Patent 5,751,276 to Shih; U.S. Patent 5,241,139 to Gungl et al. and U.S. Patent 4,145,748 to Eichelberger et al. The relevance of these patents is discussed in the Background section of the application.

The following patents are also enclosed and discussed.

U.S. Patent 5,877,458 to Flowers is directed to a surface position location system and method and is not considered particularly relevant to the present invention or touch screens.

U.S. Patent 5,717,321 to Kerth et al. is directed to drive current calibration for an analog resistive touch screen. The patent proposes (a) converting a digital control valve to a current supplied to the load resistance to thereby produce a voltage across the load

resistance, (b) comparing the voltage across the load resistance to the desired voltage to produce a comparison signal, and (c) adjusting the DC control value in response to the comparison signal so that the voltage across the load resistance becomes substantially equal to the desired voltage.

- U.S. Patent 5,644,308 to Kerth et al. is directed to an algorithmic converter.
- U.S. Patent 5,543,588 to Bisset et al. shows a touch screen driven handheld computing device.
- U.S. Patent 5,283,559 to Kalendra et al. is directed to automatic calibration of a capacitive touch screen, as opposed to an analog resistive touch screen.

The following non-patent information is enclosed.

A glossy from the Bergquist Company entitled "RTS™ Resistive Touch System" is enclosed where, under the main heading "Touch Screen Features" and the secondary heading "Five-Wire Advantages", simple 2 point calibration versus up to 25 points for others is touted.

An article entitled "Human Input Devices Based on Resistive Touch Screen Sensors" is attached providing general background material. The article is from ECN Magazines, May 15, 2001 Issue, pages 44 and 45.

A second article from ECN's June 2001 Issue entitled "Resistive Touch Screen Controller ADCs - Theory of Operation & Application Challenges" is attached also providing general background information.

The foregoing are included to fully comply with applicant's duty of disclosure and are not considered to be particularly relevant to the invention as claimed.

Respectfully Submitted,

William O'Driscoll Registration No. 33,294

Telephone Number: (608)787-2538

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE			Co	omplete if Known
			Application Number	
			Filing Date	
STATEMENT BY APPLICANT		First Named Inventor	Krajewski, T. G. et al.	
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(use as many sheets as necessary)		Examiner Name		
Sheet	1 0	f 2	Attorney Docket Number	D-2778/WOD

			U.S. PATENT DOC	UMENTS	
Examiner Initials	Cite No.1	U.S. Patent Docum Kind C Number (if kno	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		6,246,394 6,016,140	Kalthoff et al. Blouin et al.	06/12/2001 01/18/2000	
		5.751.276 5,241,139	Shih Gungl et al.	05/12/1998 08/31/1993	
		4,145,748 5,877,458	Eichelberger et a	03/02/1999 02/10/1998	
		5,717,321 5,644,308 5,543,588	Kerth et al. Kerth et al. Bisset et al.	07/01/1997 08/06/1996	
		5,283,559	Kalendra et al.	02/01/1994	

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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STATEMENT BY APPLICANT	Group Art Unit	·		
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Sheet 2 of 2	Attorney Docket Number	D-2778/WOD		
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	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), and or country where published.	T ²
Trino.c		THE BERGQUIST COMPANY, "RTS Resistive Touch System" brochure	,
		ECN, "Human Input Devices Based on Resistive Touch Screen Sensors", May 15, 2001	
		ECN, "Resistive Touchscreen Controller ADCs - Theory of Operation & Application Challenges", June 2001	
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